

**REMARKS**

Claim 59 has been amended to recite only a polysiloxane polymer thus excluding the surfactant materials of the prior art. Support is found at page 7, lines 18-29. No new matter is added by amendment.

The Examiner has objected to claims 60-64 and 70 due to inaccurate dependency on claim 59. Applicants review of the claims shows that the claims have the correct dependency, but are incorrectly written as "method" claims. The claims have been amended to recite that they are "lubricant" claims, correcting the formal problems with the claims. This amendment does not change, modify or adjust claim scope and is merely a formal correction to an error in the claim wording.

The Examiner has imposed a number of obviousness-type double patenting rejections over the existing Li et al. patents. These rejections are as follows:

1. The Examiner has rejected claims 23-25, 31-36, 38-59, 69-70 and 75-82 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-69 of Li et al., U.S. Patent No. 6,509,302.
2. The Examiner has rejected claims 23-25, 31-36 and 38-58 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of Li et al., U.S. Patent No. 6,195,194.
3. The Examiner has rejected claims 23-25, 31, 40, 42-43 and 46-58 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-70 of Li et al., U.S. Patent No. 6,427,826.
4. The Examiner has rejected claims 23-25, 31-36, 38-59, 69-70, 75 and 77-82 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-46 of Li et al., U.S. Patent No. 6,207,622.

Applicants have reviewed the Examiner's comments and substantially agree with the Examiner's position on the obviousness-type double patenting rejection. Once allowable subject matter has been found with respect to the rejections under 35 U.S.C. § 112 and 35 U.S.C. § 103(a), Applicants will submit an appropriately drafted Terminal Disclaimer to obviate the double patenting rejection.

The Examiner has rejected claims 77-79 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

Applicants regard as the invention. The Examiner comments that the lubricant must contain at least 1% of the polysiloxane lubricant material in combination with up to 20 wt% water. The Examiner argues that the claim is indefinite because the balance of the formulations is not suggested by the claims. Applicants respectfully traverse the rejection.

The Examiner is confusing claim breadth with indefiniteness. Applicants are entitled to any claim breadth as long as the claim is definite and understandable by one of ordinary skill in the art. These claims are definite because one of ordinary skill in the art will understand that the claim that an infringing material must contain at least a certain amount of polysiloxane and less than a certain amount of water. The amounts and the nature of these materials are clear from the claim rendering them quite definite, but of broad scope. It has been the law for a substantial period that the recited percentages in a claim do not have to total to precisely 100% and can include totals that are less than 100% and greater than 100%. The only requirement with respect to percentages is that they include a range of possible materials. The balance of the materials are clearly shown in the specification. Based on the specification, a range of possible lubricants are clearly disclosed that can contain the recited amounts of polysiloxane and water in lubricant materials that can have utility in this application. As such, the claims are definite but of relatively broad scope.

The Examiner has rejected lubricant composition claims 59, 69, 70 and 75 under 35 U.S.C. 103(a) as being unpatentable over Perry et al., U.S. Patent No. 5,534,172. The method claims are not rejected. The Examiner suggests that Perry et al., U.S. Patent No. 5,534,172, show a cutting fluid material containing a surfactant material not found in the invention with other components disclosed in the claimed invention. Applicants respectfully traverse the rejection.

The materials shown in the Perry et al. reference are lubricants used at the interface between a cutting tool and a metal surface for the purpose of removing metal particulate and heat from the active cutting zone. Perry et al. suggests at Column 4, lines 10 through 22, that a polysiloxane surfactant material is essential for the appropriate action of the cutting fluid. The use of the polysiloxane surfactant material acts to remove the cut metal using the surfactant characteristic of the material as the active component. These surfactants described in the reference are siloxane polymers that have hydrophilic or hydrophobic groups that provide a

range of HLB (Hydrophilic Hydrophobic Balance) in the surfactant. The Perry et al. reference suggests that other properties are obtained from different ingredients in the formulations.

The claimed formulations are quite different than the Perry et al. formulations. The claimed material utilizes a polysiloxane polymer having no surfactant properties. The Perry et al. materials are made by forming derivatives of the polysiloxane materials to introduce surfactant properties. As shown in Perry et al., the surfactant properties are obtained from functional groups that are grafted on the polysiloxane backbone, such as ethylene oxide, propylene oxide or other relatively hydrophilic or hydrophobic regions that provide the HLB (Hydrophilic Lipophilic Balance) characteristic of the material. An ordinary polysiloxane composition has no HLB since it does not have any surfactant properties whatever. A siloxane polymer would have no use in Perry's cutting fluids. A brief review of the specification and claims of the Applicants' application clearly shows that there is no indication that the polysiloxane composition is anything other than a siloxane polymer without pendant functional groups that provide the surfactant properties. Since Perry et al. emphasizes the essential need for the polysiloxane surfactant, it would not be obvious to modify the Perry et al. material by removing such a polysiloxane surfactant and simply using a polysiloxane material without surfactant functional groups. Further, it would not be obvious to modify the Perry et al. material in such a way to make it useful in lubricating the interface between a PET beverage container and a conveyor belt. Using a polymer that is not a surfactant would destroy the functionality of the cutting fluid. Clearly, from the specification and claims and from a clear statement in this response, the claims cannot read on polysiloxane surfactant materials and simply read on the polysiloxane fluids having no surfactant properties that do possess lubricating characteristics in aqueous dispersions.

The Examiner has deemed claims 26-30, 37, 60-68 and 71-74 as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for this finding.

In view of the above amendments and remarks, Applicants respectfully request a Notice

of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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Date

*Mark DiPietro*  
Mark DiPietro  
Reg. No. 28,707  
MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903  
Telephone: (612) 371-5375  
E-mail: mdipietro@merchant-gould.com

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